



Hewlett Packard
Enterprise

HPE Security ArcSight Connectors

SmartConnector for OVAL Vulnerability
Scanner

Configuration Guide

October 17, 2017

Configuration Guide

SmartConnector for OVAL Vulnerability Scanner

October 17, 2017

Copyright © 2005 – 2017 Hewlett Packard Enterprise Development LP

Warranty

The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise Development LP shall not be liable for technical or editorial omissions contained herein. The information contained herein is subject to change without notice. The network information used in the examples in this document (including IP addresses and hostnames) is for illustration purposes only. Hewlett Packard Enterprise Development LP products are highly flexible and function as you configure them. The accessibility, integrity, and confidentiality of your data is your responsibility. Implement a comprehensive security strategy and follow good security practices. This document is confidential.

Restricted Rights Legend

Confidential computer software. Valid license from Hewlett Packard Enterprise Development LP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Follow this link to see a complete statement of Hewlett Packard Enterprise Development LP copyrights, trademarks and acknowledgements:

<https://community.saas.hpe.com/t5/Discussions/Third-Party-Copyright-Notices-and-License-Terms/td-p/1589228>.

Revision History

Date	Description
10/17/2017	Added encryption parameters to Global Parameters.
11/30/2016	Updated installation procedure for setting preferred IP address mode.
05/15/2012	Added new installation procedure.
02/11/2010	Added support for FIPS Suite B and CEF File transport.
09/30/2009	Added section about increasing memory size for XML reports.
06/30/2009	Global update to installation procedure for FIPS support.
03/01/2008	Update to installation procedure.

SmartConnector for OVAL Vulnerability Scanner

This guide provides information for installing the SmartConnector for OVAL Vulnerability Scanner and to configure the device for scan report event collection.

Product Overview

OVAL is an international, information security, community standard to promote open and publicly available security content, and to standardize the transfer of this information across the entire spectrum of security tools and services.

The OVAL Language standardizes the three main steps of the assessment process: representing configuration information of systems for testing; analyzing the system for the presence of the specified machine state (vulnerability, configuration, patch state, etc.); and reporting the results of the assessment.

Configuration

The SmartConnector for OVAL supports importing OVAL reports in XML format (not text) for single host scans. The XML file folder location is specified during the installation process; no further configuration is required.

The SmartConnector for SmartConnector for OVAL Vulnerability Scanner, as other vulnerability scanners, supports two modes of operation:

Interactive

This mode is designed to be used by an operator that requires only certain reports to be sent to ArcSight ESM. In this mode, the connector first retrieves a list of the scan reports contained in the scanner's database and presents it in a UI window for you to select which scan reports are to be sent to the ArcSight Manager. After selection, click on the **Send** button to send all the selected scanner reports to ArcSight ESM. Simply close (exit) the window when all the desired scans have been sent and the connector terminates. *In this mode, the connector should not be run as a service, only as a stand alone application.*

Automatic

This mode is designed to automatically import the reports from the scanner to the ArcSight ESM Manager whenever a new scan is performed using the OVAL application. In this mode, the connector queries the database constantly to determine whether new scans have been completed. When the connector detects that a new scan has been successfully completed, it sends the scan to the ArcSight Manager. *The connector can run as a service in this mode since it is designed to run in unattended mode.*

In both modes, the SmartConnector records the IDs of the reports that have been sent to the ArcSight ESM Manager; therefore, if you use interactive mode, the list of reports available displays only the reports that are in the database and have not yet been sent to the ArcSight ESM Manager.

The same applies for **Automatic** mode; only reports in the database and not yet sent are processed.

Increase Memory Size for XML Reports

The connector cannot process reports that are too lengthy. With the default 256M memory setting, the connector can safely process reports up to 250K in length. If memory is increased to the maximum limit of 1024M, the connector can process reports up to a million lines in length. Longer reports cannot be processed. ArcSight's recommendation for long reports is to split the scan into multiple smaller reports and import them individually.

To increase the memory size for stand-alone connectors from the command line, change the following line in `ARC_SIGHT_HOME\current\bin\scripts\connectors.bat` (Windows) or `ARC_SIGHT_HOME/current/bin/scripts/connectors.sh` (Unix)

```
ARC_SIGHT_MEMORY_OPTIONS=" -Xms256m -Xmx256m "
```

to

```
ARC_SIGHT_MEMORY_OPTIONS=" -Xms1024m -Xmx1024m "
```

To increase the memory size for connectors being run as a service, change the following lines in `user/agent/agent.wrapper.conf` from:

```
wrapper.java.initmemory=256  
wrapper.java.maxmemory=256
```

to:

```
wrapper.java.initmemory=1024  
wrapper.java.maxmemory=1024
```

To increase the memory size for connectors managed by the Connector Appliance/ArcSight Management Center, the heap size can be set using a container level command.

Install the SmartConnector

The following sections provide instructions for installing and configuring your selected SmartConnector.

Prepare to Install Connector

Before you install any SmartConnectors, make sure that the ArcSight products with which the connectors will communicate have already been installed correctly (such as ArcSight ESM or ArcSight Logger).

For complete product information, read the *Administrator's Guide* as well as the *Installation and Configuration* guide for your ArcSight product before installing a new SmartConnector. If you are adding a connector to the ArcSight Management Center, see the *ArcSight Management Center Administrator's Guide* for instructions, and start the installation procedure at "Set Global Parameters (optional)" or "Select Connector and Add Parameter Information."

Before installing the SmartConnector, be sure the following are available:

- Local access to the machine where the SmartConnector is to be installed

- Administrator passwords

Install Core Software

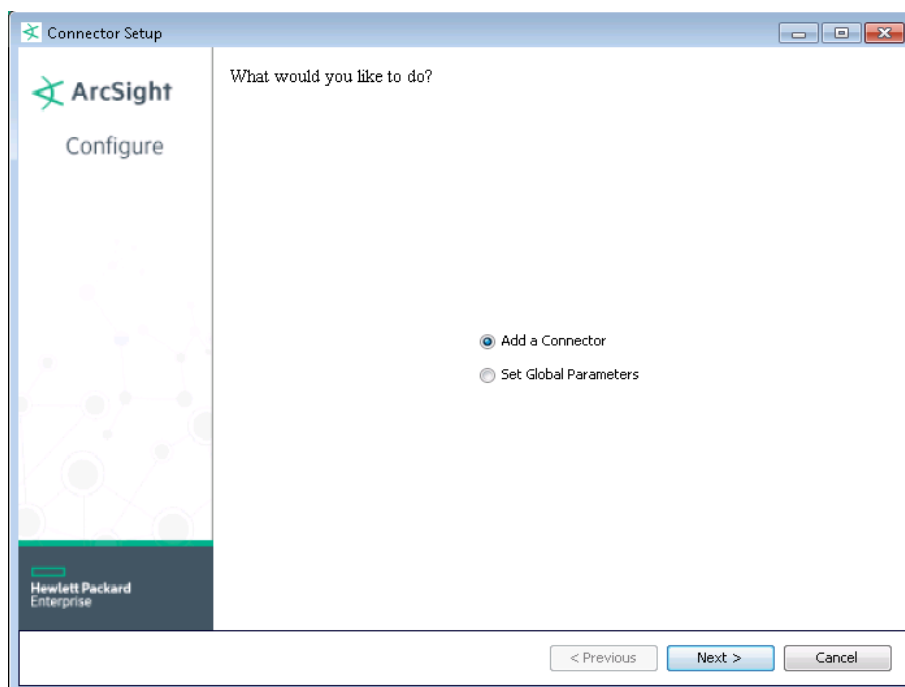
Unless specified otherwise at the beginning of this guide, this SmartConnector can be installed on all ArcSight supported platforms; for the complete list, see the *SmartConnector Product and Platform Support* document, available from the HPE SSO and Protect 724 sites.

- 1 Download the SmartConnector executable for your operating system from the HPE SSO site.
- 2 Start the SmartConnector installation and configuration wizard by running the executable.

Follow the wizard through the following folder selection tasks and installation of the core connector software:

Introduction
Choose Install Folder
Choose Shortcut Folder
Pre-Installation Summary
Installing...

- 3 When the installation of SmartConnector core component software is finished, the following window is displayed:



Set Global Parameters (optional)

If you choose to perform any of the operations shown in the following table, do so before adding your connector. You can set the following parameters:

Parameter	Setting
FIPS mode	Select 'Enabled' to enable FIPS compliant mode. To enable FIPS Suite B Mode, see the SmartConnector User Guide under "Modifying Connector Parameters" for instructions. Initially, this value is set to 'Disabled'.
Remote Management	Select 'Enabled' to enable remote management from ArcSight Management Center. When queried by the remote management device, the values you specify here for enabling remote management and the port number will be used. Initially, this value is set to 'Disabled'.
Remote Management Listener Port	The remote management device will listen to the port specified in this field. The default port number is 9001.
Preferred IP Version	When both IPv4 and IPv6 IP addresses are available for the local host (the machine on which the connector is installed), you can choose which version is preferred. Otherwise, you will see only one selection. The initial setting is IPv4.

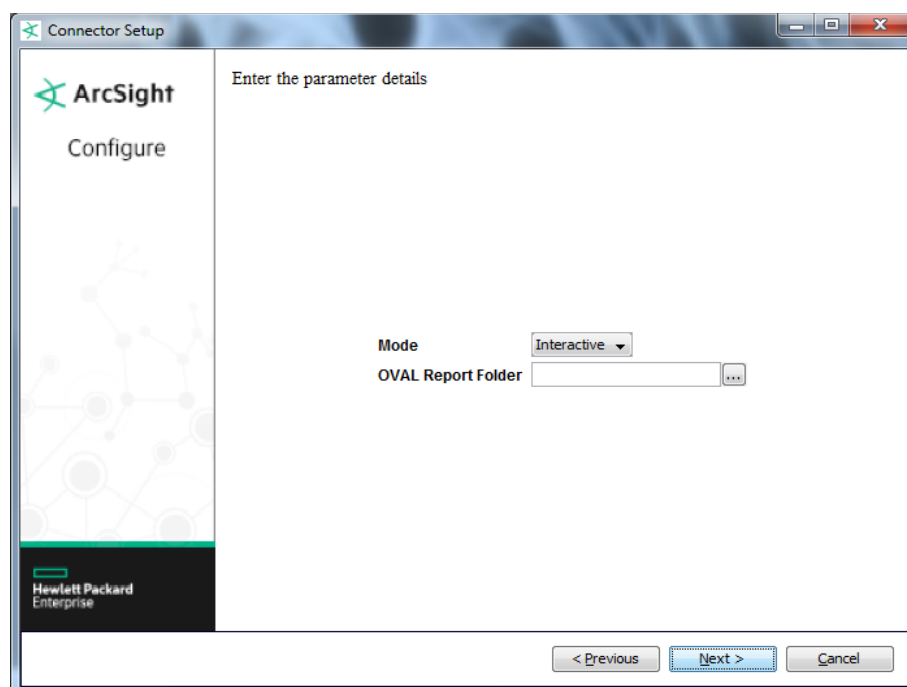
The following parameters should be configured only if you are using HPE SecureData solutions to provide encryption. See the *HPE SecureData Architecture Guide* for more information.

Parameter	Setting
Format Preserving Encryption	Data leaving the connector machine to a specified destination can be encrypted by selecting 'Enabled' to encrypt the fields identified in 'Event Fields to Encrypt' before forwarding events. If encryption is enabled, it cannot be disabled. Changing any of the encryption parameters again will require a fresh installation of the connector.
Format Preserving Policy URL	Enter the URL where the HPE SecureData Server is installed.
Proxy Server (https)	Enter the proxy host for https connection if any proxy is enabled for this machine.
Proxy Port	Enter the proxy port for https connection if any proxy is enabled for this machine.
Format Preserving Identity	The HPE SecureData client software allows client applications to protect and access data based on key names. This key name is referred to as the identity. Enter the user identity configured for HPE SecureData.
Format Preserving Secret	Enter the secret configured for HPE SecureData to use for encryption.
Event Fields to Encrypt	Recommended fields for encryption are listed; delete any fields you do not want encrypted and add any string or numeric fields you want encrypted. Encrypting more fields can affect performance, with 20 fields being the maximum recommended. Also, because encryption changes the value, rules or categorization could also be affected. Once encryption is enabled, the list of event fields cannot be edited.

After making your selections, click **Next**. A summary screen is displayed. Review the summary of your selections and click **Next**. Click **Continue** to return to proceed with "Add a Connector" window. Continue the installation procedure with "Select Connector and Add Parameter Information."

Select Connector and Add Parameter Information

- 1 Select **Add a Connector** and click **Next**. If applicable, you can enable FIPS mode and enable remote management later in the wizard after SmartConnector configuration.
- 2 Select **OVAL XML File** and click **Next**.
- 3 Enter the required SmartConnector parameters to configure the SmartConnector, then click **Next**.



Parameter	Description
Mode	Select Interactive or Automatic. See "Configuration" section for more information.
OVAL Report Folder	The absolute path to the location of the XML file.

Select a Destination

- 1 The next window asks for the destination type; select a destination and click **Next**. For information about the destinations listed, see the *ArcSight SmartConnector User Guide*.
- 2 Enter values for the destination. For the ArcSight Manager destination, the values you enter for **User** and **Password** should be the same ArcSight user name and password you created during the ArcSight Manager installation. Click **Next**.
- 3 Enter a name for the SmartConnector and provide other information identifying the connector's use in your environment. Click **Next**. The connector starts the registration process.
- 4 If you have selected ArcSight Manager as the destination, the certificate import window for the ArcSight Manager is displayed. Select **Import the certificate to the connector from destination** and click **Next**. (If you select **Do not import the certificate to connector from destination**, the connector installation will end.) The certificate is imported and the **Add connector Summary** window is displayed.

Complete Installation and Configuration

- 1 Review the **Add Connector Summary** and click **Next**. If the summary is incorrect, click **Previous** to make changes.

- 2 The wizard now prompts you to choose whether you want to run the SmartConnector as a stand-alone process or as a service. If you choose to run the connector as a stand-alone process, select **Leave as a standalone application**, click **Next**, and continue with step 5.
- 3 If you chose to run the connector as a service, with **Install as a service** selected, click **Next**. The wizard prompts you to define service parameters. Enter values for **Service Internal Name** and **Service Display Name** and select **Yes** or **No** for **Start the service automatically**. The **Install Service Summary** window is displayed when you click **Next**.
- 4 Click **Next** on the summary window.
- 5 To complete the installation, choose **Exit** and Click **Next**.

For instructions about upgrading the connector or modifying parameters, see the *SmartConnector User Guide*.

Run the SmartConnector

SmartConnectors can be installed and run in stand-alone mode, on Windows platforms as a Windows service, or on UNIX platforms as a UNIX daemon, depending upon the platform supported. On Windows platforms, SmartConnectors also can be run using shortcuts and optional Start menu entries.

If the connector is installed in stand-alone mode, it must be started manually and is not automatically active when a host is restarted. If installed as a service or daemon, the connector runs automatically when the host is restarted. For information about connectors running as services or daemons, see the *ArcSight SmartConnector User Guide*.

To run all SmartConnectors installed in stand-alone mode on a particular host, open a command window, go to `$ARCSIGHT_HOME\current\bin` and run: `arcsight connectors`

To view the SmartConnector log, read the file `$ARCSIGHT_HOME\current\logs\agent.log`; to stop all SmartConnectors, enter `Ctrl+C` in the command window.

Device Event Mapping to ArcSight Fields

The following section lists the mappings of ArcSight data fields to the device's specific event definitions. See the *ArcSight Console User's Guide* for more information about the ArcSight data fields.

OVAL Vulnerability Scanner Mappings to ArcSight ESM Fields

ArcSight ESM Field	Device-Specific Field
Category Technique	VulnerabilityCategory
Destination Address	TargetAddress
Destination Host Name	TargetHostName
Device Event Class ID	Event string
Device Product	'Oval'
Device Receipt Time	DetectTime
Device Vendor	'Oval'
Name	OvalID
